Message

Sent: 2/14/2019 5:29:16 PM
Subject: FW: FYI - LA/TX EO state ambient standards)/screening levels

From: Casso, Ruben
Sent: Thursday, April 6, 2017 1:37 PM
To: Smith, Darcie <Smith.Darcie@epa.gov>
Subject: FYI - LA/TX EO state ambient standards)/screening levels

Louisiana Toxic Air Pollutant Ambient Standard

Ethylene Oxide 1.00 ug/m3 annual average
** Based on unit risk factors and a residual risk of one in ten thousand, or other data determined to be superior by the administrative authority.

Table 51.2 Louisiana Toxic Air Pollutant Ambient Air Standards				
			Ambient Air Standard [14]	
Compounds	CAS Number	Class	(µg/m3*) (8 Hour Ave.)	(µg/m3**) (Annual Ave.)
Ethylene oxide	75-21-8	I		1.00
Formaldehyde	50-00-0	I		7.69
Glycol ethers [6]	109-86-4	II	571.00	
Hexachloro-1,3-butadiene	87-68-3	II		4.55
Hexachlorobenzene	118-74-1	II		0.20
Hexachloroethane	67-72-1	II		25.00
n-hexane	110-54-3	III	4,190.00	
Hydrazine	302-01-2	II		0.02
Hydrochloric acid	7647-01-0	III	180.00	
Hydrofluoric acid	7664-39-3	III	61.90	
Hydrogen cyanide	74-90-8	III	260.00	
Hydrogen sulfide	7783-06-4	III	330.00	
Maleic anhydride	108-31-6	III	23.80	
Manganese (and compounds) [1]	7439-96-5	II	4.76	
Mercury (and compounds) [1]	7439-97-6	II	1.19	
Methanol	67-56-1	III	6,240.00	
Methyl ethyl ketone	78-93-3	III	14,800.00	
Methyl isobutyl ketone	108-10-1	III	4,880.00	
Methyl methacrylate	80-62-6	III	9,760.00	
Naphthalene (and Methylnaphthalenes) [12]	91-20-3	II	1,190.00	
Nickel (and compounds) [1]	7440-02-0	I		0.21
Nickel (refinery dust) [1]	7440-02-0	I		0.42
Nitric acid	7697-37-2	III	120.00	
Nitrobenzene	98-95-3	II	119.00	
2-nitropropane	79-46-9	II		20.00
Phenol	108-95-2	II	452.00	
Phosgene	75-44-5	III	9.50	
Phthalic anhydride	85-44-9	III	145.00	
Polynuclear aromatic hydrocarbons [7]	206-44-0	II		0.06
Propionaldehyde	123-38-6	III	4,290.00	
Propylene oxide	75-56-9	I		27.00
Pyridine	110-86-1	III	381.00	
Selenium (and compounds) [1]	7782-49-2	II	4.76	
Styrene	100-42-5	II	5,070.00	
Sulfuric acid	7664-93-9	III	23.80	
1,1,2,2 tetrachloroethane	79-34-5	II		1.70
Tetrachloro ethylene	127-18-4	II		105.26
Toluene	108-88-3	III	8,900.00	
Toluene-2,4-diisocyanate [8]	584-84-9	II	0.86	
Toluene-2,6-diisocyanate [8]	91-08-7	II	0.86	
1,1,1-trichloroethane	71-55-6	III	45,200.00	
1,1,2-trichloroethane	79-00-5	II		6.25
Trichloroethylene	79-01-6	II		58.80
Vinyl acetate	108-05-4	III	830.00	
Vinyl chloride	75-01-4	I		1.19
Vinylidene chloride	75-35-4	II		2.00
Xylene (mixed isomers) [9]	1330-20-7	II	10,300.00	
Zinc (and compounds) [1] [10] [13]	7440-66-6	III	119.00	

Explanatory Notes:

*Based on one forty-second of the selected occupational exposure level, or other data determined to be superior by the administrative authority.

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Concentrations based on µg(x)/m3, where x is the elemental form of the metal.

[2] Includes only 2,3,7,8-tetrachlorodibenzo-p-dioxin (TCDD), and octachlorodibenzo-p-dioxin (OCDD).

[3] Includes all isomers of chlorinated dibenzo-furans.

[4] Includes o-, m-, and p-cresol, and mixed isomers.

[5] Includes 2,4- and 2,6-dinitrotoluene and mixed isomers.

[6] Glycol ethers refers to the following compounds:

Texas screening levels

TX does not seem to have an air monitoring screening level (AMCV) for EO, but they do have both short-term and long-term effects screening levels (ESLs) for EO

CAS#	Phase	ST ESLs ug/m3 & ppb	LT ESLs ug/m3 & ppb

ethylene oxide	75-21-8	-	Not Defined	20	10	-	Health	Interim	OSHA; TLV	1-Oct-03	2	1	-	Health	Interim	OSHA; TLV	1-Oct-03

What is the difference between AMCV and ESL?

AMCVs and **ESLs** are screening levels for ambient air set to protect human health and welfare.
AMCVs are screening levels used in TCEQ's evaluation of ambient air monitoring data to assess the potential for measured concentrations of specific chemicals to cause health or welfare effects. Health-based AMCVs are safe levels at which exposure is unlikely to result in adverse health effects. Long-term AMCVs are similar to the USEPA's inhalation reference concentrations.
ESLs are screening levels used in the TCEQ's air permitting process to establish maximum emission rates that are written into enforceable air permits. Health-based ESLs are set 70 percent lower than the safe level, or AMCV. This additional buffer allows TCEQ to take into account exposure to chemicals from multiple sources in air permit reviews.
A more detailed discussion of the differences can be found in Attachment C of the **Uses of ESLs and AMCVs Document**[10], or the **Fact Sheet**[11] (which discusses the health-based values used to review air permits and air monitoring data).

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1.00 ug/m3 annual average
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